THE COMMONWEALTH OF MASSACHUSETTS

WATER RESOURCES COMMISSION

Meeting Minutes for July 12, 2001

Commission Members in Attendance:

Mark P. Smith	Designee, Secretary of Environmental Affairs
Marilyn Contreas	Designee, Department of Housing and Community Development
Joseph E. Pelczarski	Designee, Coastal Zone Management (non-voting member)
Richard Butler	Public Member
David Rich	Public Member
Dave Terry	Designee, Department of Environmental Protection
Francis J. Veale Jr.	Public Member
Mike Gildesgame	Designee, Department of Environmental Management

Others in Attendance:

Michele Drury	DEM/OWR
Richard Raiche	SEA Consultants
Michele Barden	EPA
Eileen Simonson	WSCAC
Lorraine Downey	MWRA
Steve Garabedian	USGS
Jon Szarek	MWRA
Vicki Gartland	DEM OWR
Heather Hampf	DEM OWR
Linda Marler	DEM OWR
Jackie Murphy	EOEA
Gerard Kennedy	DFA
Kathy Rich	
Nina Danforth	DEM OWR

Agenda Item #1: Executive Director's Report:

Smith gave the following updates:

- Foxborough has requested an extension on the WRC decision for the Witch Pond Wells until September. The May Staff Recommendation will be discussed in August. Staff met with the town to discuss concerns over one of the triggers in the Staff Recommendation. It was agreed that more information is needed to resolve this issue. The information will be collected during the required one-year baseline period and preliminary 5 years of operational monitoring. The town has decided that the best option is to move forward. Smith noted that Commissioner Webber attended and was very helpful in facilitating the meeting. Smith expressed his thanks.
- Staff is working on comments to MEPA for a number of projects that will be coming before the WRC, including the Stoughton DEIR, which includes the IBT application, and

Wilmington. Wilmington is looking at a broader set of issues, including water supply and wastewater. If the town chooses an out-of basin option to deal with their water supply issues, they will be coming before the WRC for Interbasin Transfer approval.

- The Merrimack River Watershed Council is working with five cities in both MA and NH on CSO issues. The Council has encouraged the cities to participate in a joint study with the Army Corps of Engineers. A signing ceremony was held last week, where each town committed $100,000 as matching funds for the Corps' portion of the work. This watershed-wide study will be maximizing the investments made on CSO controls.

Smith requested a sense of the Commission on the policy and guidance on water conservation for lawns and landscapes, approved last month for public comment. The main issue that has been raised is in-ground irrigation systems. In-ground sprinklers can be very efficient if used properly, but they also allow people to use water with a lot less thought. The policy and guidance suggest that water-short communities ban in-ground irrigation systems and that homeowners in these communities limit their watering to vegetable and flower gardens and not install in-ground irrigation systems. This is a way to limit demand on the system. An unresolved question is, are in-ground irrigation systems being unfairly singled out and should we just recommend banning all outdoor water use?

Staff have been working with the irrigation installers on this and other issues to maintain a dialogue with them and not alienate them. Smith recommends going forward with public comments on the policy and guidance but having an open discussion on this issue. He stated that another option is to rewrite the policy and be more neutral on this issue.

The Commission discussed the issue and affirmed that the current position be maintained, but also recommended meeting with industry representatives to encourage them to work with water-short communities to promote the use of specific water saving devices and their proper operation. The important point is to tie water use restrictions to real triggers and to take a results-oriented approach. It was decided to put the policy out to generate public discussion and keep the guidance as is. Changes will be made to the guidance if the policy changes.

Marler gave the **Current Hydrologic Conditions Report**:

- The state received 6" rain in June, which is more than 2" above normal. The remnants of tropical storm Allison alone dropped 2" of rain in some places. Worcester and Fitchburg were flooded. There was excess precipitation in every region. The Northeast portion of the state was 210% of normal. Every region now has more than 90% of normal rainfall.
- Groundwater levels are near or above normal in most areas. There are 2 small areas still below normal (North Shore and Mid-Cape). July's rainfall may help. Every region is above normal for July, so far.
- Surface water levels are above normal. Most rivers are well above their median levels (184%, before the rains this week). The highest streamflow levels are in east, due to greater amounts of rainfall.
- Reservoir levels are where they should be; all are 90% or more above normal levels.
- Fire danger is low due to rainfall. Very few forest fires were reported.
- Predictions are for near normal conditions through the summer. Staff will be meeting with MEMA on July 25th to discuss the summer weather forecast.
- There were severe thunderstorms over the Cape and Islands yesterday. This may help raise water table levels.

Agenda Item #2: Canton's Compliance with Outstanding Conditions of its IBT Approval for Well #9

Drury reviewed the milestones connected with the Canton IBT approval. The WRC approved the proposed Well #9 in January 1998. In November 1999, the Commission found that town had met many of conditions of the approval. Two conditions remained to be met before the well could be installed:

- The Scope for Canton's Comprehensive Wastewater Management Plan/EIR must be approved by DEP, and
- Canton must revise its plan for 2:1 mitigation for the water pumped from Well #9, as required under Condition B.2 under Criterion #3, by supplying a timeline for achieving this mitigation.

Since November 1999, Canton submitted an ENF for the proposed Comprehensive Wastewater Management Plan/EIR, which was approved by MEPA. On June 11, 2001, DEP approved the scope for Canton's Comprehensive Wastewater Management Plan/EIR. On June 15, 2001, Canton submitted the timeline for its plan for 2:1 mitigation for the water pumped from Well #9. It is expected that by 2002, the amount of I/I to be removed will be just under 950,000 gallons per day. If the 2:1 removal requirement is not met, Canton will continue with this program. Canton has committed to surveying 10% of their sewer system on an ongoing basis, much like a leak detection survey.

Staff recommends that the Commission find that Canton has complied with all conditions that must be met before the well can be installed and should be allowed to begin construction of Well #9. A vote will be requested at the August meeting.

Drury went on to state that there were still conditions that must be met before any water is pumped from Well #9, as well as ongoing conditions that will have to be met as long as Well #9 is in use.

Agenda Item #3: Staff Recommendation Regarding Compliance with the Interbasin Transfer Performance Standards

Drury reminded the Commission that when the standards were passed in 1999, a two-year transition period was established to allow "lead time" for potential proponents to meet the standards. After this time, the WRC would expect proponents to be in compliance with the standards at the time of approval, as the Act requires that certain measures must be taken before a transfer can be approved. This transition period expires on August 12, 2001. The WRC must decide how to deal with applicants which are not in compliance with the standards at the time of application.

Drury stated that when the Standards were adopted, the WRC acknowledged that under certain conditions, an application could be approved if the Performance Standards had not been fully met. These are:

1. If the actions to meet the standards, and appropriate deadlines, are included as part of an enforcement order or emergency declaration issued by the Department of Environmental Protection; or
2. If local conditions make it infeasible to meet a particular performance standard. In these cases, the proponent should explain why that standard cannot be met, demonstrate an

alternate method of meeting intent of the criteria, and document any efforts that have been undertaken in order to comply with the standard.

Staff recommends that these exceptions continue.

In addition, the Performance Standards require that applicants take specific actions and provide documentation of those actions. Staff recommends that:

- If documentation is not provided, the application will be judged incomplete until such time as the documentation is provided.
- In cases where the applicant clearly has not taken the action required by the Performance Standards, the proponent will be discouraged from applying until the standard is met.
- If an applicant does not meet the performance standards, is not under an enforcement order or emergency declaration, or cannot justify noncompliance due to local conditions, as described above, but still decides to apply, the application will be denied. If other criteria are met, the proponent can reapply once the performance standards are met.

This will be coming back as a draft policy for a Commission vote at the August meeting. It then will be included in the Guidebook being developed for the Interbasin Transfer Act and posted on the IBT web-site.

There was a discussion about defining local conditions. Would this be a subjective decision? The burden would be on the applicant to show that they couldn't meet standard. Staff would bring the proponent's arguments to the WRC for discussion and also review them with legal counsel, but the final decision would be based on best professional judgement. It is hoped that this will occur before an application is received. Staff always meets with prospective applicants beforehand to discuss the process and let them know what is expected. If a proponent proceeds with an application and Staff believes that the local conditions argument is inadequate, there is a chance for the applicant to respond to Staff's recommendation.

There was concern that because the IBT application is now part of the MEPA process, there is a potential for an incomplete application to be "open" indefinitely. This is being addressed separately, through close cooperation with MEPA and the proponents.

Terry suggested that an article be submitted to the DEP newsletter, In the Main, explaining the end of transition period for the performance standards. Rich suggested that we submit the same article to the NEWWA journal.

Agenda Item #4: The relation of impervious surfaces to high flows

Gartland introduced Heather Hampf, who had worked as an intern at DEM's Office of Water Resources and had been responsible for analyzing the streamflow and impervious surface data that was used in this study.

This project came about because of issues raised with the stressed basin study and because of recent rainfall events. OWR's Flood Hazard Management Program noticed flooding seems to be getting worse in some areas. This study was designed to look at annual peak flows to determine if there are any trends. The intention was to compare peak flows to changes in land use and impervious surfaces. Twelve stations were selected for the study (some were in areas where

problems had been identified). Annual peak flows from 1953-2001 were plotted for each station in cubic feet per second per square mile, or cfsm (to normalize data in order to be able to compare stations). There was not enough data on land use, impervious surfaces or population for each station to compare this information to flows. Therefore, it was decided to compare station to station. A slight increase in peak flows was noticed in some basins. The study also looked at flow stage, which can be important in some rivers. The slope of the trend line was calculated.

The MassGIS impervious surface coefficient data layer was used with the land use data. Only one year of data was available, so land use trends could not be evaluated. The percent impervious surface was plotted against flow trends and resulted in a fairly good correlation (0.78). Basins with higher amounts of impervious surfaces also have the greatest increases in flows. The same thing was done with stage, but the relationship was not that good (Stage is dependent on many variables, including channel geometry and floodplain).

Terry asked if the relationship between impervious surfaces and ground water recharge in Zone II sites was examined. Gartland replied that the impervious surface layer on GIS doesn't qualify type. Some of these surfaces may be running off to recharge swales, etc. This is just a first cut. More data from more gages is needed. A low flow study should also be done.

Smith asked if the peaks were increasing, or are they just higher in areas with more impervious surfaces. How do they relate to median flows? Gartland answered that local conditions (slope, amount of wetlands, rainfall etc.) needed to be looked at to determine this.

Simonson suggested that we start looking at areas where there are stormwater permits. Can we track these permits and look at very small areas to try to make some conclusions? Garabedian cautioned that the slopes should be tested for statistical significance and that "hydraulic efficiency" should also be taken into account, especially in areas with flooding. Does flood mitigation increase the problem downstream?

Gildesgame asked if using gages in western part of the state which have different morphology would change anything. Gartland answered, maybe, but best thing would be to look at trends in land use compared to trends in flows.

Agenda Item #5: Implementing the new Lakes and Ponds Initiative

Murphy presented on overview of Secretary Durand's lakes and ponds initiative. A blue ribbon committee was convened by Secretary Durand in October 2000 to develop a lake and pond action strategy to identify beneficial actions which could be taken immediately. The committee was comprised of watershed associations, lake and pond associations, technical experts, legislative representatives, academics from UMASS and state environmental officials. The action strategy evolved into an implementation plan. The plan focuses on 4 themes:

- Fostering local stewardship for lake and ponds
- Focussing on a watershed approach to lake and pond management to encourage both in-lake and watershed best management practices
- Protection of pristine lakes and ponds which may not be able to support human uses
- Restoring and sustaining appropriate uses for other water bodies (recreation)

The committee developed six actions:

1. Implementation of demonstration projects to develop long-term lake watershed management plans, to promote involvement of stakeholders, and encourage partnerships. The purpose of the demonstration projects is to undertake implementation activities that can be replicated across the state. Three to five projects will be funded through grants. The deadline to apply is July 20.
2. Capacity building involves expanding existing grant programs, specifically the DEM lake and ponds grants program and the watershed initiative volunteer monitoring program; enhancing guidance and training through a lake and pond stewardship program modeled after the Riverways stream teams; compiling a handbook summary of lake and pond programs; developing a joint community preservation/watershed initiative series of workshops to focus on community preservation and lake and pond management; and developing a lakes and ponds manual for conservation commissions to focus on the integration of the Wetlands Protection Act and lakes and ponds management.
3. Establishment of an invasive species response team which will identify new infestations of invasive species and develop protocols for their immediate removal. This will be developed with DEM lakes and ponds program.
4. Targeting land acquisition and protection in lake watersheds. We are developing a GIS tool for stakeholders and municipal governments to use to identify these lands. In addition, we will encourage applicants for Self-Help Grants to focus on protection of lake and pond parcels with unique biological or habitat values
5. Development of a lakes and ponds classification system with UMASS. This will be a simple tool to identify the appropriate uses of lakes and ponds based on biological and ecological values and the uses which can be supported.
6. Review of existing regulations, policies and guidance.

EOEA has committed $1 million/year for the next three years for this initiative.

Smith reminded the Commission that there are a number of items that will be discussed at the August meeting, including votes on issues discussed today. He urged all to attend.

Meeting Adjourned

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Minutes approved 8/9/01